Barriers to Leisure Travel of Family Caregivers: A Preliminary Examination

By: Leandra A. Bedini, PhD, CTRS, LRT; Nancy Gladwell, ReD, CPRP

Bedini, L. A. & Gladwell, N. J. (2006). Barriers to Leisure Travel of Family Caregivers: A Preliminary Examination. *Topics in Geriatric Rehabilitation, 22 (4)*, 322-333.

Abstract:
Research demonstrates the health consequences of caregiving as well as the health benefits of leisure pursuits. The purpose of this preliminary study was to explore the barriers to leisure travel for family caregivers. Participants comprised 105 family caregivers in North Carolina who completed an 86-item questionnaire. Factor analysis generated 5 primary factors (Environment, Personal, Service Provision, Financial, and Shared Leisure) that represented primary constraints to leisure travel for this population. Additional analysis indicated that these caregivers greatly missed their leisure, which they gave up as a result of caregiving. Implications for practice and research exist that could address the negotiation of these barriers.
Key words: *barriers, constraints, family caregivers, leisure travel*

Article:

Pleasure travel is currently one of the fastest growing leisure pursuits of individuals 55 and older. As baby boomers mature, however, many will become confronted with issues of caring for ill and disabled parents, spouses, and other family members. Professional literature clearly illustrates that being a family caregiver is often associated with the compromised physical and/or psychological health. In addition, being a caregiver brings significant constraints to one's leisure, particularly leisure travel. Similar to caregiving itself, the lack of leisure in one's life has also been associated with poor health. Therefore, to attempt to understand the potential relationships between leisure, health, and caregiving, the purpose of this preliminary study was to explore the barriers to leisure travel as a result of caregiving for a family member.

CONSEQUENCES OF CAREGIVING ON HEALTH

As the baby boomer generation ages, individuals will begin to experience limitations in their physical activity because of chronic health conditions. A number of these individuals will require personal care that, for many reasons, will not be provided by a professional caregiver. According to *A Profile in Caregiving in America*,[1] 44.4 million individuals in the United States provide some sort of informal unpaid family caregiving and this number is expected to grow significantly in the next 25 years. Of significant concern for this population is that caregiving responsibilities have been proven to cause physical as well as psychological consequences to the health of the caregiver.[2–4] For example, studies have shown that the stress of family caregiving can lead to the production of higher stress hormones, poor antibody production, and compromised immune systems[5–8] as well as more depression than noncaregivers.[2–4] In addition, stressed family caregivers are more likely to die at an earlier age than noncaregivers or those not stressed by the demands of caregiving for a family member.[9]

CAREGIVER'S LEISURE

Despite the added responsibility of family caregiving, caregivers greatly value and miss their leisure.[10,11] Thus, the loss of leisure is another significant consequence of family caregiving. According to National Family Caregivers Association,[3] family caregivers in the United States identified loss of leisure as one of the top 3 negative consequences to caregiving. In addition, research shows that people who become caregivers have difficulty

retaining leisure in their lives.[10,12–14] More significantly, caregivers have identified leisure travel as a particular loss within their leisure pursuits, reporting that caregiving interfered with vacation plans and other leisure travel.[15,16] As a result, family caregivers (as well as their care recipients) will likely find their leisure travel severely restricted or eliminated as a result of having to redirect their free (leisure) time and discretionary money away from pleasure travel toward the care of a loved one with illness or disability. This loss and disruption in leisure travel can cause additional consequences for family caregivers such as resentment, [11, 17] strain,[18] and sorrow.[19]

LEISURE CONSTRAINTS

Family caregivers clearly experience myriad constraints to the pursuit of their leisure travel. Negative life events such as the illness or disability of a loved one (and in this case, often a travel companion) present significant challenges to the individual who takes on the caregiving role. The conceptual frameworks used for this study included the constraints model by Crawford et al[20] as well as results from an interpretive study on the barriers to leisure travel of family caregivers that suggested that family caregivers experience constraints in a way that differs from traditional constraints models.[11]

According to the constraints model of Crawford et al,[20] there are 3 sequential categories of constraints to one's pursuit of leisure: intrapersonal, interpersonal, and structural. The model proposes that intrapersonal constraints to leisure are also linked to the development of leisure preferences. They are typically internal to the individual and could consist of factors such as personality and beliefs (eg, worry, stress, feelings of inadequacy). More recent studies have furthered the definition of intrapersonal constraints. In a study of adults, Samdahl and Jekobowich[21] found that *intrapersonal constraints* for their subjects included family responsibilities, lack of a leisure partner, or a mismatched leisure partner. On the basis of these descriptions, it is likely that family caregivers have potential to experience intrapersonal constraints to their leisure pursuits.

The second type of barriers described in the model of Crawford et al[20] are interpersonal constraints that are most likely encountered after intrapersonal constraints are "overcome." *Interpersonal constraints* include factors dealing with social and cultural interactions that interfere with participation such as attitudes of others, lack of support, and cultural differences. Again, this category potentially fits family caregivers partially because of the likelihood to travel with their care recipient. For example, studies by Bedini[22] as well as Bedini and Henderson[23] found that perceived stigma (perceptions of others' attitudes) posed a significant threat to leisure pursuits of people with disabilities.

The last group of constraints described in the model is *structural constraints* that include restrictions outside of the individual (eg, weather, finances, physical access, lack of transportation) and, on the basis of the model, can be addressed only after interpersonal constraints are dealt with.

In addition to the constraints model, we considered conclusions derived from a study by Gladwell and Bedini[11] that also examined barriers to leisure travel. In a series of 13 interviews, family caregivers shared experiences, whereby they were constrained or compromised in leisure travel. The data also suggested that family caregivers experience constraints in a way that differs from traditional constraints models. Therefore, this study is also considering nontraditional patterns of leisure constraints for family care-givers in relation to travel for tourism reword here.

METHODS

Participants/sampling

The researchers used the 28 agencies listed in the American Association of Retired Persons's *Family Caregiving in North Carolina (2002)* directory as a sampling frame for this study. E-mails were sent to a contact person for each agency asking whether they were willing to help distribute survey packets to potential respondents through their caregiver support groups and related services. Nine agencies responded positively, and subsequently 4 agencies were chosen that represented 4 different geographical regions of the state (mountains, piedmont, sandhills, and coastal). Participants were identified through the support group

coordinators for each of the 4 sites, who then estimated the number of survey packets required. The questionnaire was sent to a total of 870 informal family caregivers among the 4 groups. One hundred five usable surveys were returned.

Instrument

The instrument comprised a total of 82 items; 56 items about barriers and 26 demographic questions. The items about barriers to leisure travel were developed from relevant literature as well as quotes and phrases from the interviews from the qualitative study conducted by Gladwell and Bedini.[11] In addition, the 26 demographic/ profile items represented 8 basic demographics (ie, age, sex, race, education, income), 12 specific questions dealing with their caregiving duties (ie, hours and type of support, care recipient's disability, level of assistance required by care recipient), and 6 questions that addressed issues regarding traveling. The barriers items used a 4-point Likert-type scale, with "4" representing "strongly agree" and "1" representing "strongly disagree." All other items were nominal or open ended.

Data collection

Because of issues of confidentiality, the researchers disseminated the 870 requested questionnaires through 4 liaisons who were administrators in the identified caregiver agencies. The liaisons distributed coded packets that included a cover letter, questionnaire, and self-addressed and stamped return envelopes to family caregivers through support group meetings or direct mailings. The potential respondents were asked to complete the survey and then mail them back to the researchers directly. Reminder postcards were sent to the liaisons to distribute to their respective potential participants 2 weeks after the initial mailing.

Data analysis

Data were analyzed using SPSS, Version 11. 5, with descriptive statistics, as well as factor analysis, independent *t* tests, and analyses of variance (ANOVAs). Independent *t* tests and ANOVAs were run to determine whether there were statistically significant differences for the factors generated among relevant demographic profile variables.

RESULTS

Descriptive statistics

Demographic results indicated that the average respondent was female (84%), white (79%), with an average age of 61 years (range = 32–87 years). The majority of the respondents cared for a parent or parent-in-law (53%), with another 31% of respondents caring for a spouse or partner. The remaining 16% provided care for other relatives and/or friends. Approximately two thirds (68%) of the respondents were married/partnered, whereas about a third (32%) were separated, divorced, widowed, or never married. The average length of caring for the care recipient was 7.4 years. In terms of education, 64% had less than a 4-year degree, with another 28% completing a BS/BA and 6% with a graduate degree.

The most common condition of the care recipients was Alzheimer's disease (44%), with another 15% of the care recipients experiencing a stroke (cerebrovascular accident, CVA). The remaining disabilities of the care recipients included heart disease (7%), cancer (5%), Parkinson's disease (4%), or a variety of other conditions that totaled less than 2% each. Forty-two percent of the care recipients required level 4 assistance (constant), whereas only 18.5% required level 1 care (little to no assistance). In addition, 44% of the respondents provided care themselves more than 40 hours per week, whereas only 16% provided care less than 10 hours per week. Similarly, only 15.5% of the care recipients received care more than 40 hours per week, with just more than 48% receiving care fewer than 10 hours per week. More than half of the care-givers (63%) lived with their care recipient, whereas others' care recipients lived independently (22.3%) or in a nursing facility (6%). The respondents received assistance primarily from family (28%) or friends (15%). Other sources of support included adult day care (16%), home healthcare (15%), and support groups (13%).

Approximately two thirds (67%) of the caregivers reported being retired or not employed, with the remaining one third (33%) worked full-time or part-time in addition to caregiving and other responsibilities. More than

30% stated that they had to give up their job when they became a caregiver. Fifty-four percent of the respondents had a household income of less than $25,000 per year.

Most caregivers defined *leisure* as "unobligated time to do with as I please" (58%), and almost half (48%) stated they completely gave up leisure travel as a result of caregiving responsibilities. Thirty-four percent stated that they engaged in no leisure travel at all. The average number of trips for the remaining 66% who did travel was 1 to 2 leisure travel experiences each year. Although the respondents' leisure travel had been greatly reduced, they identified in a wide variety of travel interests. The majority of the respondents said that their current travel is made up of visits to family and friends (18.1%), visits to the beach or mountains (17.1%), shopping (12.8%), and day trips (12.4%). See Table 1 for details.

Results from individual item mean scores (out of a possible 4) suggested that the responding caregivers greatly missed their travel (M = 3.34). In addition, these respondents indicated that they do not have much freedom when they travel with their care recipient (M = 3.27), do not travel because it is stressful (M = 2.96), feel guilty when they travel without their care recipient (M = 2.94), and that they choose to stay closer to home when travel with their care recipient (M = 3.06). Analysis indicated, however, that there were no statistically significant differences for these variables.

Factor analysis

Exploratory factor analysis yielded 5 factors representing barriers to leisure travel with fairly strong Cronbach alpha reliabilities. These factors were Environment (a = .84), Personal (a = .82), Service Provision (a = .80), Financial (a = .89), and Shared Leisure (a = .71) (Table 2). The *Environment* factor loaded with 13 items that involved the context of travel such as feeling safe or comfortable in travel settings. For example, respondents that scored high in this factor found items that addressed situations like crowding, lack of support from family, concerns about accessibility, lack of medical assistance, and crime to pose barriers to their leisure travel. The *Personal* factor loaded with 10 items, and represented the personal impact of caregiving on the actual travel experience. For example, respondents who scored high on this factor found guilt for traveling without the care recipient, resentment, lack of spontaneity, lack of freedom, stress, or sense of loss for the travel as barriers to their leisure travel. The *Service Provision* factor loaded with 9 items, and involved the accessibility of facilities/accommodations and the quality of service delivered by employees of travel-related businesses. For example, respondents who scored high on this factor found lack of accessible facilities and transportation, unskilled service providers, and inconsideration to their care recipients' needs as barriers to their leisure travel. The *Financial* factor comprised 5 items that related to economic difficulties related to caregiving or travel expenses. Respondents that scored high on this factor found that they do not have money to travel because of caregiving costs. The last factor, *Shared Leisure*, loaded with 9 items that reflected the relationship between the care-giver and care recipient with regard to their mutual (or shared) leisure travel experiences. For example, respondents who scored high on this factor found lack of encouragement to travel without care recipient, lack of travel companion, and lack of others to care for care recipient to be barriers to their leisure travel. This factor also represented the need for similar interests in a travel companion.

Table 1. Demographic profile variables*

Sex	
Male	17 (16.2)
Female	88 (83.8)
Age of caregiver	
Range 32–87	$M = 61$ y
Age of care recipient	
Range 7–97	$M = 77$ y
Race of caregiver	
Black/African American	17 (16.2)
Hispanic/Latino	1 (1.0)
American Indian/Alaska Native	2 (1.9)
White/European American	83 (79.0)
Mixed race	2 (1.9)

Marital status of caregiver	
Married or living with partner	71 (68.3)
Separated or divorced	16 (15.4)
Widowed	11 (10.6)
Never been married	6 (5.8)
Number of years as primary family caregiver	
Range 1–62	$M = 7$ y
Relationship to care recipient(s)	
Spouse/partner	33 (31.4)
Child (with illness or disability)	5 (4.8)
Parent	54 (51.4)
Friend	3 (2.9)
Sibling	4 (3.8)
Parent-in-law	2 (1.9)
Other	4 (3.8)
Living arrangements with your care recipient	
Care recipient lives in my home	54 (52.4)
I live in my care recipient's home	11 (10.7)
Care recipient lives independently in own home separate from mine	23 (22.3)
Care recipient lives in nursing home or assisted living facility	6 (5.8)
Other	9 (8.7)
Care recipient's primary disability/illness	
Alzheimer's/dementia	43 (43.9)
Parkinson's	4 (4.1)
Cancer	5 (5.1)
Stroke	15 (15.3)
Heart disease	7 (7.1)
Other	24 (24.5)
If your care recipient has a second significant disability, please indicate which of the following	
Alzheimer's/dementia	5 (9.3)
Parkinson's	0 (0)
Cancer	1 (1.9)
Stroke	5 (9.3)
Heart disease	15 (27.8)
Other	28 (51.9)

(continues)

Table 1. Demographic profile variables* *(Continued)*

Describe your care recipient's level of primary disability/illness	
Level 1 requires little to no assistance for most personal care	18 (18.4)
Level 2 requires some assistance with personal care	18 (18.4)
Level 3 requires assistance with at least 2 personal care activities daily	21 (21.4)
Level 4 requires constant care and assistance	41 (41.8)
How many hours per week do you provide care to your care recipient	
<10	15 (15.8)
10–24	22 (23.2)
25–39	16 (16.8)
>40	42 (44.2)
Type of support you receive in caregiving	
Adult day care	28 (16.0)
Home healthcare	27 (15.4)
Support groups	23 (13.1)
Friends	26 (14.9)
Family members	49 (28.0)
Assisted living (residential)	3 (1.7)
Other	19 (10.9)
How many hours per week do you receive this support	
<10	43 (47.8)
10–24	19 (21.1)
25–39	14 (15.6)
>40	14 (15.6)

Education level	
Some high school	8 (8.2)
High school graduate	16 (16.5)
Some college	28 (28.9)
2-y degree	10 (10.3)
4-y degree	27 (27.8)
Masters degree	4 (4.1)
Doctoral degree	2 (2.1)
Other	2 (2.1)
Employment status	
Employed full-time	26 (26.5)
Employed part-time	6 (6.1)
Retired	44 (44.9)
Not employed	22 (22.4)
Did you have to give up a job when you became a caregiver	
Yes	30 (30.6)
No	68 (69.4)
Household income	
<$15,000	19 (21.8)
$15,000–$24,999	21 (24.1)
$25,000–$29,999	7 (8.0)
$30,000–$39,999	14 (16.1)
$40,000–$49,999	12 (13.8)
$50,000–$74,999	8 (9.2)
≥$75,000	6 (6.9)
Do you find that your caregiving situation causes financial hardship	
Yes	45 (48.4)
No	48 (51.6)

(continues)

Table 1. Demographic profile variables* *(Continued)*

Do you prefer to travel alone or with a companion	
Travel alone	7 (7.4)
Travel with a companion	87 (92.6)
If you travel with a companion, who is your preferred travel partner	
Spouse/partner	60 (60.0)
Parent	2 (2.0)
Friend	26 (26.0)
Other	12 (12.0)
Is your preferred travel partner also your care recipient	
Yes	30 (29.7)
No	71 (70.3)
How often do you travel with your care recipient	
None	35 (34.3)
1 time per year	18 (17.6)
2 times per year	14 (13.7)
3 times per year	15 (14.7)
4–6 times per year	10 (9.8)
7–10 times per year	4 (3.9)
>10 times per year	6 (5.9)
What types of travel/trips do you enjoy	
Visiting friends/family	76 (18.1)
Visits to beach, mountain, lakes, etc	72 (17.1)
Shopping	54 (12.8)
Day trips	52 (12.4)
Visiting historic/cultural sties	38 (9.0)
Entertainment (eg, amusement parks, concerts)	27 (6.4)
Visits to resorts	27 (6.4)
Bus tours	26 (6.2)
Cruises	26 (6.2)
Adventure travel	13 (3.1)
Others	10 (2.4)

*Values given are number (percentage) unless otherwise indicated.

Independent *t* tests and ANOVAs were run to determine whether there were statistically significant differences on each of the 5 factors for various demographic profile variables. Most demographic profile variables showed no statistically significant differences for any of the 5 factors. Therefore, for each of the 5 barriers identified in the factor analysis, respondents experienced similar barriers to leisure travel regardless of age, marital status, level of education, living arrangements with the care recipient, type of disability, sex, and hours of care received from various support systems.

The variables that did show statistically significant differences included relationship to care recipient, level of income, race, and level of care required for the care recipient. Results indicated that those caregivers who were caring for a spouse found more barriers to their Shared Leisure travel experiences than did those caregiving for a parent or another family member or friend ($P = .001$).

Table 2. Factor loadings

Environment factor ($\alpha = .84$)	
1. If I travel with my care recipient, I stay closer to home*	.667
2. My family does not encourage me to travel with my care recipient	.661
3. I do not travel with my care recipient because I do not feel confident to handle situations	.643
4. I do not travel with my care recipient because I feel uncomfortable/insecure in new environments	.617
5. I often do not travel with my care recipient because our destinations are too crowded	.612
6. It is difficult to travel with my care recipient because of his or her daily medical needs	.557
7. When I travel to new places with my care recipient, I worry that accommodations/attractions are not as accessible as I have been told	.547
8. Fear of crime is a major reason I do not travel as much as I want	.457
9. I feel unwelcome by travelers when I am with my care recipient	.430
10. I do not travel with my care recipient very often because it is stressful to him or her	.428
11. I do not travel with my care recipient because he or she often lacks energy needed to travel	.422
12. When I travel with my care recipient, tourism service employees are not very helpful or understanding	.347
13. I often do not travel for leisure because I am too tired	.331
Personal factor ($\alpha = .82$)	
1. I would travel more is I had someone to care for my care recipient	.674
2. I resent not having time for travel	.662
3. I miss the travel I gave up since I became a caregiver	.581
4. I do not travel with my care recipient because it is stressful to me	.557
5. My care recipient does not like it when I travel for leisure	.571
6. Fear of crime does not prevent me from traveling where I want*	.560
7. When I travel with my care recipient I do not enjoy it because I cannot be spontaneous	.551
8. When I want to travel without my care recipient, other family members are supportive and help out while I am away*	.534
9. I do not have much freedom when I travel with my care recipient	.499
10. I feel guilty when I travel without my care recipient	.416
Service Provision factor ($\alpha = .80$)	
1. I would travel more if I knew more accessible services	.713
2. I would travel more with my care recipient if there were more accessible services	.704
3. My care recipient and I do not travel because of lack of accessible transportation	.650
4. I do not travel with my care recipient because I am worried that the accommodations are not accessible	.591
5. I do not travel much because of lack of knowledge of travel opportunities	.563
6. I would take my care recipient on guided vacations if they moved at slower paces	.507
7. Travel service providers lack the skills to meet the needs of my care recipient	.478
8. When I travel I do not enjoy myself because I am worried about the care recipient care is receiving in my absence	.451
9. I will not stay/visit accommodations that are not accessible when I travel with my care recipient	.379

(continues)

Table 2. Factor loadings *(Continued)*

Financial factor ($\alpha = .89$)	
1. Lack of money is the major reason I do not travel for leisure	.849
2. My economic situation prevents me from traveling as much as I want	.817
3. Caregiving places a financial restrictions on my leisure travel	.779
4. I have enough money to travel to the places I want to visit*	.762
5. Caregiving causes financial barriers to my leisure travel	.735
Shared Leisure factor ($\alpha = .71$)	
1. My care recipient is my preferred travel companion	.682
2. When I travel with my care recipient, the accessibility of facilities and attractions is not a concern	.616
3. My care recipient and I have similar leisure travel interests	.598
4. My care recipient and I travel to places that we are both interested in	.526
5. I feel too old to travel	.480
6. I would travel more if I spent less time at work	.451
7. My care recipient is uncomfortable being cared for by someone else	.418
8. My family does not encourage me to travel without my care recipient	.416
9. I do not travel for leisure because I do not have travel companion	.331

*Reverse coded.

Household income also seemed to contribute to perceptions of barriers in the respondents. Those respondents who had a household income of less than $25,000 found more barriers to their leisure travel on the basis of Financial constraints ($P = .000$). This group also found more barriers than did those individuals with incomes of more than $25,000 on the Service Provision factor ($P = .008$).

Results indicated that respondents who were people of color (nonwhite) experienced greater barriers to their leisure travel from Service Provision than did the white respondents ($P = .03$). However, the white respondents experienced greater barriers within Shared Leisure than did the nonwhite ($P = .05$).

As could be expected, respondents who provided care for their care recipient more than 40 hours per week experienced more barriers within the Personal factor than care-givers providing care for fewer than 10 hours per week ($P = .014$). Related to this result, respondents who cared for individuals that required constant care and assistance found greater barriers from Service Provision ($P = .004$) as well as the items within the Personal factor ($P = .028$).

DISCUSSION

In a summary of constraints research, Jackson posited that with few exceptions, "the empirical evidence to date supports the validity of distinguishing among intrapersonal, interpersonal, and structural constraints and these are arranged in a sequential hierarchy."[24(p8)] The 5 factors generated from this preliminary study fit only partially with the constraints model of Crawford et al.[20] The Personal factor supported the model's definition of intrapersonal constraints. Similarly, the Financial factor clearly fit into the model's category of structural constraints, however, the Environmental and Service Provision factors were not distinct, representing structural as well as interpersonal constraints. As expected, the Shared Leisure factor supported the category of interpersonal barriers, but not completely. Similar to the model, as well as Samdahl and Jekubovich,[21] items dealing with a constraints related to the presence of a leisure partner were clearly interpersonal. Several of the items that made up the Shared Leisure factor, however, addressed individual comfort, thus more appropriately aligned with the intrapersonal constraint category. Therefore, the results of this study indicate that this group of respondents seems to experience constraints that are unique to them and not fully found within the traditional constraints model by Crawford et al.[20] In addition, there seemed to be no pattern to suggest a hierarchy of constraints. This result is similar to those of Hawkins et al[25] who also found no hierarchy of constraints in a study of adults with mental retardation.

The results also suggest that this population does not fit cleanly into Jackson's[26] model of "Conventional View of Changes in Constraints," which suggests that constraints that comprise time and commitments, such as being too busy with work and family, tend to follow an inverted "U" as one ages, whereby the constraints one experience gradually become more intense as one ages, up to a point when the patterns switches and subsequently wanes. He stated that this pattern was accounted for by "marker events" such as marriage, high school, empty nest, and retirement. Considering the results of this study, perhaps family caregiving should be considered as a marker event as more and more individuals take on this responsibility. Clearly, for these respondents, leisure is sacrificed for caregiving responsibilities. For adults and older adults who take on these responsibilities, it is likely that the "U" pattern would stretch out and plateau for much longer periods of time than for noncaregivers.

Further examination of the nature of the factors in relation to the constraints model, as well as family caregiving is warranted. Jackson et al[27] introduced the idea of negotiating constraints, suggesting that everyone faces constraints to leisure; not everyone deals with constraints by not participating in leisure, and negotiated participation is likely to be different than participation that was engaged in without constraint. Raymore[28] posited the examination of "facilitators" to leisure. She defined *facilitators* as ". . . factors that are assumed by researchers and perceived or experienced by individuals to enable or promote the formation of leisure preferences and to encourage or enhance participation."[28(p39)] She noted that the concept of facilitator does not imply that an equivalent constraint has been met, nor does it suggest that the absence of constraint equals facilitation. Rather, facilitators help enable the pursuit of leisure. This concept of considering the resources that can encourage and support participation in selected leisure activities has merit for the populations of caregivers described in this study.

Limitations

Limitations of this study include concerns about sample size, generalizability, and lack of diversity in the sample. The fact that the study included only 105 respondents raises the issue of appropriateness of sample size for the factor analysis that was conducted. Tinsley and Tinsley[29] noted that the larger the sample the better. They stated that factors generated from analysis of small samples are less generalizable than those from large samples. Typically, researchers strive to have a minimum of 5 to 10 subjects per item, which was not provided in this study. Tinsley and Tinsley,[29] however, found no empirical evidence to support this ratio. In addition, Arrindell and van der Ende[30] studied the stability of factors as a function of subjects-to-variables ratio. They also concluded that observations-to-variables ratio had no effect on factor stability. Finally, the sample was very "white" and predominantly female. This clearly overrepresents 2 predominant demographics.

Conclusion

This was a preliminary study that examined barriers to leisure travel for family caregivers. This is important because family caregivers typically reduce or abandon their leisure to take on extra responsibility related to the care of family members with illness or disability. At the same time, leisure has been proven to be an important contributor to health and coping ability. Within this context, barriers to leisure travel present a significant loss to family caregivers. Clearly, the respondents of this study missed the leisure travel they gave up in order to become a caregiver. In addition, the travel they now pursue, if any, is compromised and "burdened" by their caregiving responsibilities. The reliabilities of the 5 identified factors generated from this study suggest that the development of the instrument used in this study has potential to satisfy this purpose of identifying barriers to leisure travel for this population. In addition, results from subsequent analyses give insight into the perceived needs of family caregivers to pursue their leisure travel.

Recommendations for practice

These data give direction to leisure travel as well as healthcare practitioners regarding the importance of not only accessible but also sensitive service provision. It is clear that guilt, worry, and level of disability are significant barriers to pursuing leisure travel for caregivers. Results indicated that respondents who had a household income of less than $25,000, were nonwhite, and provided

more than 40 hours of care per week experienced more barriers in service provision than other respondents. Service providers (health and leisure travel) need to work with these families, as well as other healthcare service providers, to facilitate psychologically as well as physically safe and comfortable environments within which caregivers and their care recipients can pursue their leisure travel. In addition, service providers need to recognize the extent of financial barriers for family caregivers who receive no monetary compensation for their caregiving, and often give up their jobs to take on these responsibilities. Ways to accommodate the care recipients, either on trips or while the caregiver travels, are essential to begin to address the needs of this subgroup of respondents.

Another consideration for both health and travel professionals is the indication that shared leisure is compromised for individuals who are white and caring for their spouses. Again, it is important to find ways to facilitate travel with their spouse (sometimes not the care recipient) to address their leisure travel needs.

Recommendations for research

Researchers should consider examining the differences in perceived barriers on the basis of several of the variables that showed significant differences within the identified factors (ie, race, relationship to care recipient, level of care, and income). In addition, other more "personal" methods of gathering data should be considered (ie, focus groups, interviews, case studies) to understand better the specific contributors that create/maintain these barriers to leisure travel for family care-givers. Finally, duplicating this study with a large number of participants is important to not only confirm but perhaps expand the results from this study.

References

1. *The Pfizer Journal: A Profile in Caregiving in America*. 2nd ed. New York: Impact Communication Inc; 2005.
2. Cannuscio CC, Jones C, Kawachi I, Colditz GA, Berkman L, Rimm E. Reverberations of family illness: a longitudinal assessment of informal caregiving and mental health status in the nurses' health study. *Am JPublicHealth.* 2002; 92:1305–1311.
3. *Family Caregiving Demands Recognition: Caregiving Across the Lifecycle.* Milwaukee, Wis: National Family Caregivers Association/Fortis; 1998.
4. Yates ME, Tennstedt S, Chang B. Contributors to and mediators of psychological well-being for informal caregivers.*JGerontol.* 1999; 54B:P12–P22.
5. Kiecolt-Glaser JK, Glaser R. Depression and immune function: central pathways to morbidity and mortality.*JPsychosom Res.* 2003; 53:873–876.
6. King AC, Castro C, Wilcox S, Eyler AA, Sallis JF, Brownson RC. Personal and environmental factors associated with physical inactivity among different racial-ethnic groups of U.S. middle-aged and older-aged women. *Health Psychol.* 2000; 19:354– 364.
7. O'Rourke N, Tuokko H. The psychological and physical costs of caregiving: the Canadian study of health and aging.*JAppl Gerontol.* 2000; 19:389–404.
8. Vitaliano PP, Young HM, Zhang J. Is caregiving a risk factor in illness? *Curr Dir Psychol Sci*. 2004; 13(1):13–16.
9. Schulz R, Beach SR. Caregiving as a risk factor for mortality.*JAMA.* 1999; 282:2215–2219.
10. Bedini LA, Phoenix TL. Perceptions of leisure by family caregivers: a profile. *Ther Recreation J.* 2004; 38:366–381.
11. Gladwell NJ, Bedini LA. In search of lost leisure: the impact of caregiving on leisure travel. *Tour Manag.* 2004; 25:685–693.
12. Dunn NJ, Strain LA. Caregivers at risk? Changes in leisure participation. *J Leis Res.* 2001;33:32– 55.
13. Mannell RC, Salmoni AW, Martin L. Older adults caring for older adults: physically active leisure lifestyles as a coping resource for the health of caregivers. *Soc Leis.* 2002; 25:397–420.
14. Seltzer MM, Li LW. The dynamics of caregiving: transitions during a three-year prospective study. *Gerontologist.* 2000; 40:165–178.
15. Kleban MH, Brody EM, Schoonover CB, Hoffman

C. Family help to the elderly: perceptions of sons-in-law regarding parent care. *J Marriage Fam.* 1989; 51:303–312.
16. Ory MG, Hoffman RR, Yee JL, Tennstedt S, Schulz R. Prevalence and impact of caregiving: a detailed comparison between dementia and non-dementia care-givers. *Gerontologist.* 1999; 39:177–185.
17. Bedini LA, Guinan DM. If I could just be selfish...: caregivers' perceptions of their entitlement to leisure. *Leis Sci.* 1996; 18:227–240.
18. Robinson B. Validation of a caregiver strain index. *JGerontol.* 1983;38:344–348.
19. Lindgren CL. Chronic sorrow in persons with Parkinson's and their spouses. *Sch Inq Nurs Pract.* 1996; 10:351–370.
20. Crawford DW, Jackson E, Godbey G. A hierarchical model of leisure constraints. *Leis Sci.* 1991; 13:309–320.
21. Samdahl DM, Jekubovich NJ. A critique of leisure constraints: comparative analysis and understandings. *J Leis Res.* 1997; 29:430–452.
22. Bedini LA. Just sit down so we can talk: perceived stigma and the pursuit of community recreation for people with disabilities. *Ther Recreation J.* 2000; 34:55–68.
23. Bedini LA, Henderson KA. Women with disabilities and the challenges to leisure service providers. *JPark Recreation Adm.* 1994; 12(1):17–34.
24. Jackson EL. Leisure constraints research: overview of a developing theme in leisure studies. In: Jackson EL, ed. *Constraints to Leisure.* State College, Pa: Venture; 2005:3–19.
25. Hawkins BA, PengJ, Hsieh C, Eklund SJ. Leisure constraints: a replication and extension of construct development. *Leis Sci.* 1999; 21:179–192.
26. Jackson EL. Impacts of life transitions on leisure and constraints to leisure. In: Jackson EL, ed. *Constraints to Leisure.* State College, Pa: Venture; 2005:115– 136.
27. Jackson EL, Crawford DW, Godbey G. Negotiation of leisure constraints. *Leis Sci.* 1993; 15: 1 –11.
28. Raymore LA. Facilitators to leisure. *J Leis Res.* 2002;34:37–51.
29. Tinsley HA, Tinsley DJ. Uses of factor analysis in counseling psychology research. *J Couns Dev.* 1987;34(4):414–424.
30. Arrindell WA, van der Ende J. An empirical test of the utility of observations-to-variables ratio in factor and components analysis. *Appl Psychol Meas.* 1985;9:165–178.